# VENEREAL DISEASE CONTROL IN THE ARMY*

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Venereal diseases, according to Surgeon-General Gorgas,[1] are the greatest cause of disability in the Army and present the most serious communicable disease problem of the war. In meeting this large problem, the Army is aiming to get maximum results by applying basic epidemiologic principles through sound administrative measures and controlling its methods by the statistical study of results.

## EPIDEMIOLOGY

Compared with most other communicable diseases, the venereal diseases are well understood. Their causative organisms have been discovered, and the methods of transfer of infection are thoroughly known.

The three principal venereal diseases, syphilis, gonorrhea (including all gonococcus infections) and chancroid, are spread essentially by contact. The commonest manner of transfer is through sexual intercourse, and all the other ways of spread may well be regarded as incidental or secondary to transfer through promiscuous sex relations. As long as venereal diseases are prevalent there will be many infections through other methods than sex contact, for example, the transmission of syphilis from the mother to the unborn child, the spread of syphilis through kissing or by the use of common drinking or eating utensils, the gonorrheal infection of the eyes of the child in the birth canal, the infection of eyes by fingers soiled with gonorrheal discharges, and the infection of children with gonorrhea through contact with soiled objects in the household.

The problem of control is simplified by the fact that these diseases do not exist in the lower animals and are not carried by them. Neither is the transfer of infection by inanimate objects common, as the causative organisms tend to die out rapidly away from the human body.

Another important fact in the epidemiology of venereal diseases has a very direct bearing on methods of control. These diseases are spread principally by disease carriers, persons who appear to be well and regard themselves as healthy, but who are nevertheless capable of transmitting infection.

## CONTROL

The methods of control of venereal diseases are essentially the same as those of other preventable diseases limited to human beings and spread by contact. We cannot include in these methods, as in some diseases, the artificial immunization of individuals, because no successful methods have been discovered.

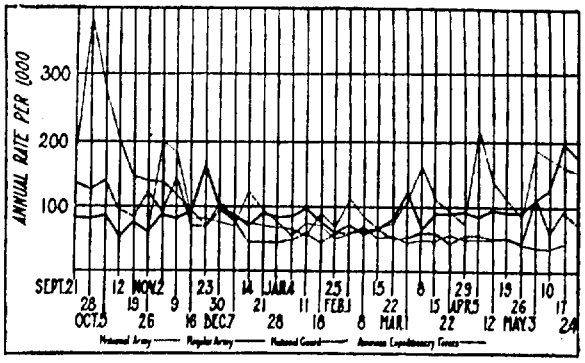


Fig. 1.—Annual venereal disease rates per thousand men in the National Army, Regular Army, National Guard and Expeditionary Forces by weeks for the period from Sept. 21, 1917, to May 24, 1918, inclusive.

We have at hand, however, methods that are capable of reducing venereal diseases to an almost insignificant amount. These methods are the prevention of infective contacts, through various measures, later to be described, and the early treatment of persons who have been exposed in spite of these measures. The method of the treatment of persons after a known or suspected exposure is illustrated by the dropping of silver nitrate into the eyes of the new-born child to insure against gonorrheal infection, and by the early, or prophylactic, treatment of soldiers after a known or possible exposure to venereal infection.

Control of venereal diseases has been totally inadequate in civilian life because public health authorities, with few exceptions, have until recently felt little responsibility for the control of these diseases, which, taken together, have no rival, not even tuberculosis, in their importance as a public health problem. They are highly prevalent, very destructive, and most preventable.

## THE SIZE OF THE ARMY'S PROBLEM

In the Army, venereal diseases exceed all of the other more serious communicable diseases in the total

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1. Gorgas, W. C.: The Venereal Diseases and the War, Soc. Hyg., 1918, **4**, 3, 39.

number of cases and the total disability caused. Figure 1, shows the annual venereal disease rate per thousand men, by weeks, in the National Army, the National Guard, the Regular Army and the Expeditionary Forces. In Figure 2, the annual venereal disease rates per thousand for the several armies are presented by months. While showing the prevalence of venereal disease in the Army, these two charts give little information regarding the results of control measures in and around Army camps. The fluctuations depend principally on the number of new troops brought into the Army from the civilian population with its high prevalence of venereal diseases. The shape of the curves is largely determined by the number of added troops examined for the first time within the several weeks or months.

There has been much unintentional misinterpretation of the venereal disease figures of the Army, owing to failure to understand the method through which the annual rate for a given week or month is obtained. All cases discovered and recorded for the first time in a given week are multiplied by 52, as an annual rate is desired instead of a weekly rate, and divided by the total number of men in thousands, to obtain the rate per thousand. Thus, if one man in a group of a thousand men was found to have venereal disease in a given week, the annual venereal disease rate for that week would be 52 per thousand, and it would be a grave error to quote the figures in such a way as to give the impression that fifty-two infected men had been discovered in the thousand men in one week.

In Figure 3 is shown the relative prevalence of venereal diseases to others of the more important communicable diseases in the Army, and it will be noted that venereal diseases, as a group, are the most prevalent of these diseases.

The burden of venereal disease is suggested also by Figure 4, which shows the percentage distribution of the more important communicable diseases in the Army and also of injuries, computed on the basis of all diseases and injuries reported. Again venereal diseases, taken as a group, head the list.

For measuring the results of venereal disease control work in the Army and in extracantonment areas, the figures of total cases recorded are of little value, as the many cases brought in by newly drafted men mask the relatively small number in which the infection was contracted after the men were in uniform. In Figure 5 are shown the annual rates per thousand men for cases contracted before and after enlistment in five National Army camps, one National Guard camp, and one department of the Army (Camps Lee, Sherman, Upton, Meade, Custer and Kearney and the Western Department). Complete figures for the full period covered are not at present available for other camps or departments, but these figures are probably representative.

The annual rate for early, or prophylactic, treatments also is shown in Figure 5. The annual prophylactic rate, when divided by 52, gives the average number of men applying for prophylactic treatment in a given week in a thousand men. When it is kept in mind that some men will apply for many treatments in the course of a year, it is evident that many men are completely avoiding exposure, and escaping venereal disease for that reason. The curve for the last few months suggests that the educational program is producing increasing results.

The amount of venereal disease contracted by the men after putting on the uniform is astonishingly small, while the amount of chronic venereal disease brought to the Army from civil life is a serious burden. The recent Army experience with venereal disease contradicts the popular impression that the boys and young men are under such influence and protection at home that they are in little danger of being exposed to venereal disease, but that in the Army they are exposed to extreme temptation and are most certain to succumb.

In fairness to the civilian population, it must be pointed out that the disease brought into the Army is the accumulated uncured disease of the newly enlisted men. These cases, some of them of years' standing, are compared in the chart with the cases freshly contracted in the Army. Accurate estimate cannot be made of the amount of venereal disease which would have been contracted if the soldiers had remained civilians, but the contrast between the old and new cases shown in the chart is so great that it seems safe to conclude that in civil life the men would have contracted much more venereal disease and would have secured many fewer cures through treatment. In any event, only a small part of the cases are contracted

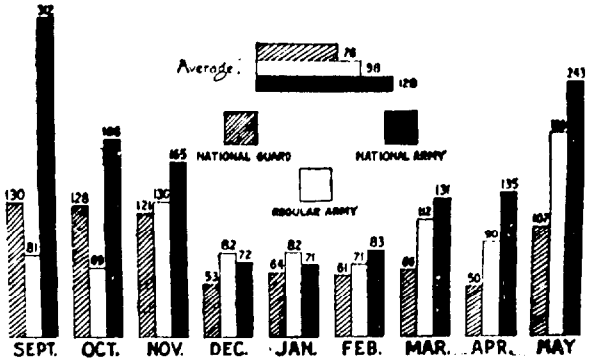


Fig. 2.—Annual venereal disease rates per thousand men in the National Guard, National Army and Regular Army by months, for the period from September, 1917, to May, 1918, inclusive and the average rates for the same period.

under Army conditions of good discipline, protection against exploitation, education, and early, or prophylactic, treatment.

Figure 6 is a cartoon prepared for use with popular exhibits. It is intended to awaken the public to its responsibility for the Army's disability from venereal disease. Less than one sixth of the venereal disease burden of the Army, according to the data in Figure 5, can be reduced by the control and protection of the soldier. The remainder can be prevented only in the communities from which the future soldiers will come. It is the aim of the Army to help create a popular demand for venereal disease control by public health officials, with the assistance of law enforcement and educational agencies.

In Figure 7 are shown data available for a short period for five National Army camps, Camps Dix, Lee, Upton, Meade and Pike. These figures show even a lower proportion of cases contracted after enlistment, about one nineteenth of the total number. The chart gives the figures separately for syphilis, gonorrhea and chancroid, thus permitting a comparison of the relative prevalence of these diseases.

In Figure 8 are shown rates for Camp Lee for venereal disease contracted before and after enlist-

ment, segregated according to colored and white troops. The relative number of white and black troops newly brought into camp each week is not shown, and therefore a close comparison between the curves is not justified; but the chart illustrates the relatively large amount of venereal disease brought by colored troops into some of our camps. Any plan for venereal disease control which neglects the problem in the colored population is shortsighted and will fail to get maximum results.

At Camp Lee, by direction of the Surgeon-General, a psychologic study was made of the white men isolated for venereal disease. At the time of this study, 12 per cent. of the negroes and 2 per cent. of the white men in the camp had venereal disease. Among these white men, 34 per cent. were unable to read or write English with sufficient facility to take the tests. In the camp as a whole, only 18 per cent. were unable to do this. The white men able to take the psychologic tests obtained a median score approximately 75 per cent. as high as that for the camp as a whole. Moreover, less than half as many of the diseased white men, in proportion to total numbers, obtained high scores, as did the white men in the camp as a whole. A low grade mentality seems to increase the probability of getting a venereal disease and keeping it. A successful campaign against venereal disease must reach persons of this class and diminish the number of infections among them and increase and improve their medical treatment.

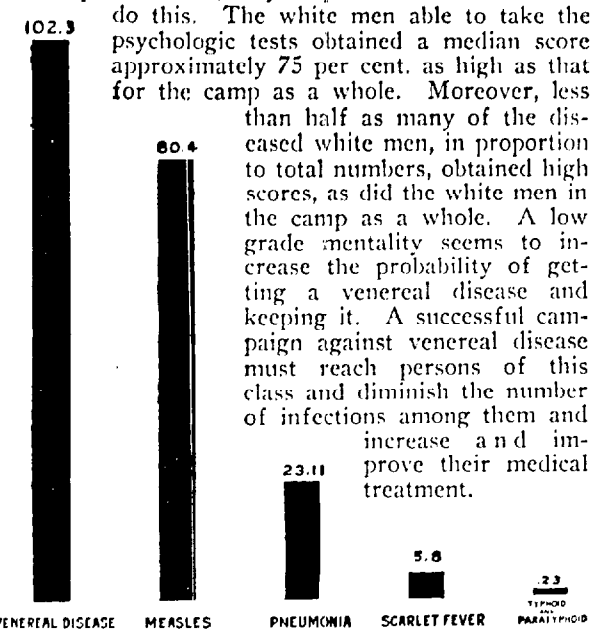


Fig. 3.—Comparison of the annual rates per thousand men for all troops in the United States between Sept. 21, 1917, and May 31, 1918, of certain of the more important communicable diseases.

### VENEREAL DISEASE IN THE CIVIL POPULATION

Complete records of the number of drafted men having venereal diseases would furnish a most valuable index of the prevalence of these diseases in men of the draft age in the civil population. Such figures are not at present available, but the report of the Provost Marshal-General to the Secretary of War on the first draft showed that 4.27 per cent. of the rejections in a group of 10,000 men were due to venereal diseases.[2] From one of the National Army camps, Camp Lewis, figures were submitted showing that 3.04 per cent. of the men sent to camp were found to have venereal disease on examination on arrival at camp.

### CONTROL MEASURES AMONG THE SOLDIERS

Before the present war, the principal emphasis in the prevention of venereal disease in the Army was placed on the instruction of the soldier against exposure and in the administration of the early, or prophylactic, treatment to those who had exposed themselves in spite of instruction. The Army had little success in persuading civilian communities near Army posts to protect soldiers against exploitation through commercialized prostitution and the sale of liquor. Conditions near Army camps were prone to be made worse than elsewhere by uncontrolled exploiters who sought the soldiers' money. In the present war, all are interested in the soldier's welfare, and most communities respond patriotically to any definite request of the Army for correction of conditions that would tend to demoralize or disable the fighting man. With the best possible assistance by civilians, much work would still have to be done with the soldier himself.

Within the camp the soldier is instructed to avoid exposure to venereal disease. This is done through company commanders' talks, special lectures, moving pictures, stereomotorgraph exhibits, and pamphlets. The Army film "Fit to Fight" is a moving picture drama, which is proving most effective. The soldier is given not only a strong appeal to keep himself morally clean and physically fit, but he is also further restrained from sex indulgence by information about the venereal diseases and the disability that they cause. As an additional safeguard, the men are instructed to report for the early, or prophylactic, treatment in case they should expose themselves in spite of the advice and information given them. They are told of the Army regulation requiring that every soldier exposing himself must report at the Army prophylactic station, or be subject to court martial. The soldier is also instructed that he will lose his pay while disabled from venereal disease, and will be confined to camp as long as he is infectious. Even the instructions about prophylaxis seem to reduce the number of exposures to venereal disease by impressing the soldier with the serious consequences which may follow the patronizing of prostitutes.

The early, or prophylactic, treatment is given in the camps and also at Army prophylactic stations maintained in cities visited frequently by soldiers. The prophylactic treatment record serves as a valuable index of the success or failure of the law enforcement measures in making prostitution inaccessible. The prophylactic treatment consists of the cleansing of the parts and the injection of a 2 per cent. protargol solution, or approved equivalent, and the external application of 30 per cent. calomel ointment.

It is in the soldier's playtime that he gets into trouble. Telling him what to avoid is not enough. The War Department Commission on Training Camp Activities has realized this fully. It is supplying facilities for athletics, theatricals and other forms of recreation, so that the soldier can have a good time through clean sport and harmless amusement. This work is going on within the camp and also in the nearby communities.

At least twice a month every soldier is inspected for venereal disease and other infections. If found infected, he is put under treatment, so that he can be rendered noninfectious and returned to duty as soon as possible. As a protection to the civilian community, he is restrained to the camp as long as he could transmit venereal disease. He loses his pay while disabled, and he is also tried by court martial and punished if he violates the order requiring the taking of the early, or prophylactic, treatment.

In many camps the soldier who has venereal disease is questioned as to the source of his infection, and,

2. Report of the Provost Marshal-General to the Secretary of War on the First Draft Under the Selective Service Act, 1917, Government Printing Office, 1918.

when practicable, the information is turned over to the civilian health authorities to be used as a clue in discovering venereal disease patients who need isolation and treatment. When the soldier is unable to give the correct name or an identifying description of the prostitute, the building in which the infection took place is often stated. This information helps the health authorities and law enforcement officials to detect the most dangerous venereal disease carriers, and the lodging houses and hotels that cater to them. It assists the authorities to find those carriers whose activity and

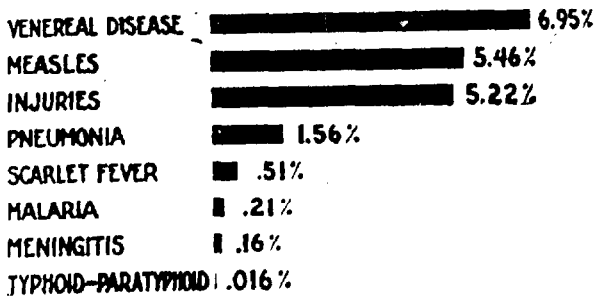


Fig. 4.—Percentage distribution of injuries and certain of the more important communicable diseases based on the total number of diseases and injuries reported, for all troops in the United States from Sept. 21, 1917, to May 31, 1918.

infectiousness are such that they are actually infecting soldiers and probably civilians—sometimes in large numbers. From the standpoint of epidemiology this method is highly important. It is similar to the finding of the most dangerous typhoid carriers by investigating outbreaks of typhoid fever caused by them, and tracing the infection back to its source. The method is selective, as it tends to pick out those infectious persons who are exposing the most people and are clever enough to be escaping the law enforcement and health authorities.

## CONTROL WORK AMONG CIVILIANS

Infection of the soldier with venereal disease always involves the civilian. The greater part of the infections in our Army were contracted before the men enlisted, and the civilian alone can correct the conditions responsible. The lesser part were contracted by the soldier from civilians after enlistment, and this problem can be solved only through the cooperation of both civilian and Army agencies.

When the war began, the importance of work for the protection of the enlisted man in civilian communities near the camps was fully realized, but the importance to the Army of protecting the future soldier in his home town was not yet apparent. The War Department Commission on Training Camp Activities undertook a most active campaign to diminish the temptation of soldiers. Emphasis was placed on the repression of prostitution and bootlegging in extracantonment zones and nearby cities. The work has been of greatest assistance in the control of venereal disease in the Army and should be given much of the credit for the low rate of infection with venereal disease after enlistment.

At the present time, twenty-six commissioned officers of the Sanitary Corps of the Army are engaged in the Law Enforcement Division of the War Department Commission on Training Camp Activities, in combating venereal diseases, by means of stimulating the enforcement of municipal, state and federal laws having to do with the suppression of prostitution and of liquor selling to soldiers. In this way more than eighty red light districts have been abolished, including thirty-four outside the prescribed 5 mile zones around camps and at distances varying from 7 to 100 miles from the camps. More than 200 cities and towns of the various states have cooperated in the abolishment of districts, the more drastic enforcement of present laws, and the enactment of new legislation, especially that designed to enable the authorities to cooperate effectively with the Surgeon-Generals of the Army and Navy in protecting soldiers and sailors against venereal diseases.

There is also carried on by the Law Enforcement Division most important work with women and girls, conducted by a large number of protective workers, and also work by the Section on Reformatories and Detention homes, aimed at the provision of facilities for the isolation and treatment of women and girls having venereal disease.

In the work among women who have become infected through prostitution, effort is made to return them to society not only well in body, but trained for self-support through legitimate occupation. Some are feebleminded or incorrigible for other reasons, and for them prolonged or permanent custodial care is sought. This work is handicapped by the limited capacity of the state institutions available for the segregation of these persons so highly dangerous to the public health.

Many male venereal disease carriers pass through the courts and are lodged in prisons and jails. The men arrested for sex offenses come under the same laws and regulations as the women, and in most states may be examined and isolated if infected. A much larger group of infected men are sent to prisons and jails for other offenses, and were formerly permitted to serve their terms and go out uncured to spread syphilis and gonorrhea. Prison officials throughout the country are being interested in their opportunity


Fig. 5.—Annual venereal disease rates and prophylactic treatment rates per thousand men by weeks for Camps Sherman, Lee, Upton, Meade, Custer, Kearney, and the Western Department, from Oct. 26, 1917, to May 10, 1918, inclusive, showing the amount of venereal disease contracted before and after enlistment.

to clear up a vast number of venereal disease carriers, male and female, by proper treatment within the prisons. A great stimulus to this work was given by a recent letter of the United States Attorney-General to all United States attorneys instructing them to see that all persons arrested under federal laws for certain offenses are examined for venereal disease by the local health authorities, if they will do so, and other-

wise through special arranagement. If the diseased person is sent to prison, the prison authorities are to be notified so that treatment will be given, and if the patient is discharged before he or she is noninfectious, the health authorities are to be notified in due season,


Fig. 6.—Cartoon based on the statistics presented in Figure 5, which showed that over five sixths of the venereal disease cases in six camps and one department were contracted before enlistment.

so that they can institute quarantine and administer further treatment as a protection to the public.

While the Law Enforcement Division is a powerful health agency, as it represses prostitution, which is the most prolific source of venereal disease, its work must be supplemented by educational and public health activities of other kinds in civilian communities.

The Training Camp Commission is carrying on educational work among men, particularly those in the industrial centers, and among women and girls. A great deal of literature is going out, and popular lectures are being given. This instruction is bound to have its effect in fewer exposures to venereal disease and more cures among the infected.

### COOPERATION BY PUBLIC HEALTH AGENCIES [3]

In the control of venereal diseases, we have essentially a public health problem, and the state and municipal health authorities can do a great deal to diminish their prevalence. The Surgeon-Generals of the Army, the Navy and the Public Health Service have approved a set of suggestions for state board of health regulations which are meeting general favor and are helping to establish a uniform American plan for venereal disease control. These suggestions were based largely on measures already in force in certain states and cities. They recognize that venereal disease carriers, male and female, must be controlled and cured, and that prostitution must be repressed if venereal disease is to be reduced to a minimum. They provide for the reporting of cases by office number and the quarantine of patients when necessary to protect the public health.

The Army, Navy and Public Health Service are receiving the cooperation of many agencies in venereal disease control among civilians. The Red Cross is maintaining twenty-four venereal disease clinics in extracantonment zones, and the Public Health Service is furnishing the medical personnel. States and cities are organizing venereal disease control work, often under a separate bureau or division with special funds.

In thirty-four states and one territory, venereal diseases are already required to be reported. In the following twenty-six states and one territory, according to reports received by the Surgeon-General of the Army up to June 20, the report is made by physician's office record number: Alabama, Arizona, Arkansas, California, Connecticut, Georgia, Hawaii, Illinois, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, Mississippi, New Mexico, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Washington, Wisconsin and Virginia.

In the following eight states, the report is made by name: Colorado, Florida, Indiana, Maryland, New Jersey, Ohio, West Virginia and Vermont.

In the following twenty-three states and one territory, these diseases may be quarantined by the health authorities when necessary to protect the public health: Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Massachusetts, Minnesota, Mississippi, New Jersey, New Mexico, New York, Ohio, South Carolina, South Dakota, Texas, Washington and Virginia.

In the following eleven states there are separate bureaus or divisions of venereal diseases under the state board of health: Arkansas, California, Colorado, Illinois, Indiana, Louisiana, Massachusetts, Michigan, Minnesota, New York and Ohio.

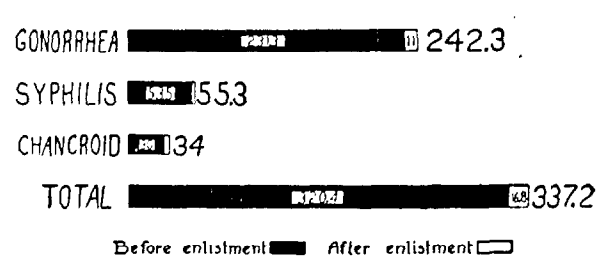


Fig. 7.—Annual rates per thousand men, before and after enlistment, in five National Army camps, Dix, Lee, Upton, Meade and Pike, for gonorrhea, syphilis, chancroid and total venereal disease, based on thirty-seven special weekly reports from March 29 to May 24, inclusive.

In the following fourteen states and one territory in which venereal diseases are reported by office number, the name of the patient is reported if he fails to continue treatment or to observe precautions to prevent spreading disease: Arizona, Arkansas, California, Illinois, Hawaii, Louisiana, Massachusetts, Michigan, Minnesota, Mississippi, New Mexico, South Carolina, Texas, Washington and Virginia.

The American Social Hygiene Association and other nonofficial social hygiene organizations are assist-

3. As this article goes to press the federal measures for assisting the states in combating venereal diseases under the provisions of Chapter XV of the Army Appropriations Act (1918) are being drawn. An appropriation of $4,100,000 is provided for medical, law enforcement and educational work in addition to approximately $3,000,000 for the continuance of the activities of the commissions on training camp activities.

ing actively in the educational work which is securing the public support necessary for success. Educational work is being carried on and venereal disease clinics are being established by various institutions and associations, as well as by health departments.

Venereal disease prevention has been greatly stimulated by the action of the United States Public Health Service in assigning officers in uniform to organize and direct bureaus of venereal diseases for state boards of health requesting this assistance. Definite arrange-

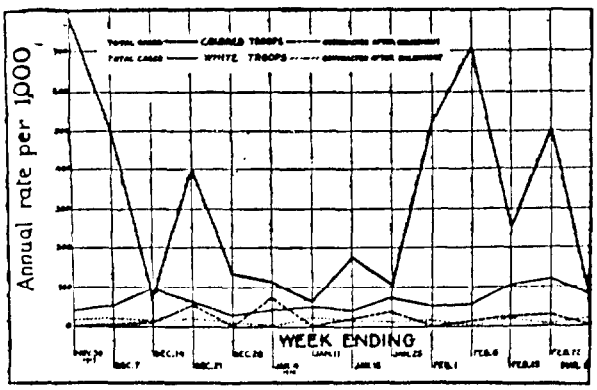


Fig. 8.—Annual venereal disease rates per thousand men, by weeks, in Camp Lee, for colored and white troops, before and after enlistment, from Nov. 30, 1917, to March 1, 1918.

ments for such assignments have been made with twenty-three states. In two additional states, North Carolina and Kansas, the Army is assigning medical officers to this work.

Venereal diseases are at last being recognized by health departments as important public health problems. Their work will be successful if it is well administered and also based on epidemiologic investigations. If venereal disease becomes prevalent in a camp of soldiers or a civilian community, investigation should be made to ascertain the exact source and underlying conditions of that particular large number of cases. Conclusions without investigation have over and over again placed the source of infection hundreds of miles away from the true focus, and have resulted in serious errors as to the time of exposure.

It is clear that the largest results in venereal disease control in the Army will come through the work in the civilian population. This work requires the cooperation not only of federal, state and municipal health authorities, but also of the medical profession as a whole. Moreover, the support of the general public, fostered by a wise publicity, is necessary before greatest results will be achieved.

### RESULTS OF CIVILIAN EFFORTS

A striking example of the result of control measures has been reported by the extracantonment officer stationed at San Francisco, and is shown in Figure 9. The upper curve shows the monthly annual rate per thousand men for prophylactic treatments in a large number of troops in and near the city. The lower curve represents the annual venereal disease rate per thousand for the same months. Infections contracted before enlistment were excluded. A number of the cases of venereal diseases, varying from 2 per cent. of the total in February to 21 per cent. in January, were also excluded because the Army records of sources of infection showed that the exposures were not related to San Francisco. Moreover, the venereal disease cases were charted more nearly according to date of infection by advancing the dates one week.

The fall in the number of prophylactic treatments and cases of venereal disease among the soldiers was coincident with active measures by the city health department for the examination of persons arrested for sex offenses and their quarantine and treatment, if infected, regardless of whether they were convicted or acquitted by the courts. Law enforcement, which was lax at the beginning of the period covered by the chart, was greatly strengthened during the first month, but was temporarily somewhat weakened in February, 1918. The decided fall in the number of prophylactic treatments and the drop in the number of new cases of venereal disease showed that there were decidedly fewer exposures. The organization of educational and recreational work among the soldiers was probably another factor in the result.

The experience of San Francisco showed plainly that large results could be obtained when law enforcement and the isolation and treatment of dangerous carriers are carried on side by side, each supplementing the other.

### CONCLUSIONS

1. Venereal diseases are the greatest single cause of disability in the Army.

2. Most of the cases of venereal diseases among the United States soldiers, over five sixths of the total in units from which the figures have been obtained, were contracted by the men before enlistment.

3. Exposure of the soldier to venereal diseases is being successfully reduced by education, wholesome recreation, the enforcement of laws against prostitution and alcohol, and the discovery and control of venereal disease carriers.

4. These measures are applicable to civilian communities outside the extracantonment areas, and should be generally applied for the protection of the health of the future soldier and of the general public.

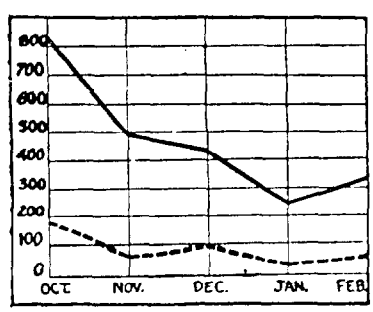


Fig. 9.—Annual venereal disease and prophylactic treatment rates for troops in and around San Francisco, not including cases contracted before enlistment and others obviously not related to San Francisco, showing results of public health measures and law enforcement. Solid line, prophylactic treatments; broken line, new cases of venereal disease.

5. Venereal disease control should be under the general direction of the public health authorities, but they should receive the cooperation of educational and law enforcement agencies, and should not hesitate to employ lawyers and other men and women trained in nonmedical lines, just as engineers are called on to remove the causes underlying waterborne typhoid.

6. In the Army, venereal disease is still further reduced by compulsory early, or prophylactic, treatment of men exposed in spite of the measures aimed at preventing such exposure.

7. The reduction of venereal diseases, as a group, forms the greatest public health problem of today and

the one which gives the most promise of solution in the immediate future. Efficient measures of prevention are known and are being demonstrated, and need only to be more widely applied.

## ABSTRACT OF DISCUSSION

Col. V. C. Vaughan, Washington, D. C.: I do not see how any one can listen to this paper and learn these facts without concluding that it is ineffective to secure protection for our soldiers against venereal diseases without control of these diseases among civilians. When the Michigan National Guard was assembled a little more than a year ago in Detroit and was quartered in the armory, the buildings just across the street were occupied in part by prostitutes, and soldiers were openly solicited by them. When the Michigan National Guard, after this, was examined for transfer to the U. S. Army, it was found that a large percentage of them were infected with venereal diseases. A most unsatisfactory condition existed in Philadelphia and continued until the Secretary of the Navy actually took control of police affairs. Similar conditions have existed in Newport and Providence, R. I. The Army medical officer can control his soldiers in camp, and, to a certain extent, he can control them outside of camp. For instance, the commanding officer at camp has absolute control of his soldiers in the camp. If there is a house of prostitution in an adjacent village the commanding officer can put a guard around that house and prevent any soldier from going into it. He cannot, however, prevent any party coming out of the house, nor can he prevent any one except soldiers from going in. It is true that in certain camps the commanding officer has taken matters in his own hands and made raids on houses of prostitution. This was done at Spartanburg, S. C. I understand that it was done by the city of Spartanburg making soldiers local policemen and conferring on them the necessary authority. If it is desirable to protect the young men in the Army from venereal diseases, why should not the young men who are civilians, and, in all probability are soon to become soldiers, be protected from the same disease? Of all the camps in the United States, Pike led during the six winter months in pneumonia and in venereal diseases. Pike is located in Arkansas. There are boys at Pike from Michigan, Illinois, Iowa and other states. It seems to me that it is quite important for the fathers and mothers of those boys that they should have the same protection against venereal diseases at Pike that other sons have at Grant, Custer and Dodge. The same efficiency in the administration of all camps should be exercised. Section 13 of the draft law seems to make vigorous provision for protection of the soldiers against venereal disease in a zone about the camp. There are about seventy camps in the United States, not counting any camp with a population less than 10,000, and the zone around the camps is the United States, and federal authorities must take charge of these matters. There is only one thing to do, and that is to federalize for the time of the war the various health services of this country. What is true of venereal diseases is, in a somewhat different way, but fully to the same extent, true of other diseases. If it is proper to protect the boy in the Army from typhoid fever by vaccination, why should it not be proper to protect the boy in civilian life, the prospective soldier of the future, from the same disease by the same manner?

Dr. P. S. Schenck, Norfolk, Va.: At the request of the National Council of Defense, Norfolk was asked to do something toward the control of the venereal situation. The health department induced the city council of Norfolk to pass a series of ordinances which required that every person arrested for any cause shall go through a physical examination. These persons are in charge of the department of health until they are released. This necessitated the employment of several physicians to carry out the work. As a matter of control, I have adopted a card check system. When the person is arrested and taken into the police court, before any disposition whatever is made of the case he is subjected to a physical and bacteriologic examination. This applies to both males and females. If for any reason the first or preliminary examination is unsatisfactory, the person draws what we call a yellow card, which reads that a bacteriologic and physical examination is being made and he or she is to be held until the examination is completed. That card is attached to the mittimus, which goes over to the city jail hospital with the person, and no disposition of that case can be made by the police authorities as long as the yellow card is attached to the mittimus. When that examination is carried further, if we find that he is infected, the sheriff is given a red card. The red card is attached, in place of the yellow card, to the mittimus, and that red card will keep him in the jail hospital until it is substituted by a white card. He is put under active treatment by the physicians. We have also inaugurated a venereal clinic which is open every day in the year, but as long as that red card, which shows that that man or that woman is infected, is attached to the mittimus in the jail hospital he stays there. After a certain length of time, not less than sixty days—there is no re-examination made on a person under thirty days—if we find in the case of gonorrhea that we get two negative results taken from smears made from three different specimens and find from the bacteriologic examination that there appears to be no gonococci, a white card is given to the sheriff, and he or she is released. This card only states that we did not find the gonococci. We have in the course of erection a venereal hospital in which we propose to put these cases. We are also erecting on our city farm a home in which, after these young girls are released, we shall hold them until some disposition can be made of the case other than turning them back into the city. In the past six or seven weeks, since this has been put into effect, we have arrested approximately 800 persons, and 400 of them were infected. In the female population the girls run all the way from 11 years of age up to 56. We have had any number of 12-year-old girls. We were confronted with this situation, and it was very demoralizing to the department at first to find that we were taking young girls 12 years of age and 13 and 14, and for want of better facilities for handling them we were holding them in the jail hospital, where they were daily associating with the veteran prostitute, the drug addict and the alcohol habitué, and in order to correct that I induced our council to give us the money to build a hospital for these younger persons and remove them from that vicious environment.

Surgeon J. O. Cobb, U. S. P. H. S., Chicago: I am working on the venereal propaganda in the states of Indiana, Illinois, Michigan, Wisconsin and Minnesota in conjunction with state and local health officers. I speak to you as an optimist, though you are going to hear the pessimistic side of it. The states haven't the money, the municipalities haven't the money, and it will be a hard proposition to inaugurate a nation-wide propaganda that will stand on both feet. The state of Illinois has $6,000. In this state, at first, Dr. Drake was not very enthusiastic, but he got out and went to work in the municipalities, and now he is as enthusiastic as can be. Over in Michigan they have all of a million dollars that they can use. Naturally, Michigan is not afraid to tackle the problem. In Indiana they haven't anything. We have got to go to each town in Indiana and beg them for money and ask them to pass ordinances. They have not even the machinery for handling the question. In Wisconsin they have $7,500 and the legislature meets two years hence. They have not any machinery up there that is really worth while. Minnesota has $35,000, and they are getting under way. Now, that story is pretty nearly true of the United States. California has $30,000. Los Angeles appropriated $20,000 and San Francisco, I think, $40,000, and so it goes. The point is just this: Now is the time to strike. All these municipalities will come across, I am convinced. I was a pessimist myself when I started out, about the money side of it, but down in Indiana the towns are going to come forward and pass ordinances that are good ordinances, and they are going to start the machinery to make this a permanent movement, and that is what it ought to be. Colonel Vaughan has said that the country ought to be militarized for the venereal propaganda for the period of the war. We naturally think that is what it ought to be. The municipalities will do anything that the

Army asks to have done. Therefore, I think the movement is going to succeed.

In Indiana and Illinois and other places small bodies of troops are brought together to be sent to the camps. The venereal curve jumps right up there because these young men are having a last fling at civil life. It is astonishing what we find in these surveys. This sexual insanity of young girls and even of older women, mentioned by the gentleman from Norfolk, seems to be widespread, and is a serious problem. I wish also to call attention to the psychologic problem as affecting physicians.

Many doctors are pessimistic on the venereal question, and they are going to refuse to report certain private cases. Venereal ordinances must be of such a nature that there is no excuse for any physician not to report. Now, here is a fault in Illinois. These reports should be made to the state health office only, and never to the local health office, unless the patient fails or refuses to carry out his obligation. I am now convinced, just recently, that venereal cases should be reported by name. I will tell you why. Six of the states require the name, all the others require the name or number. In Chicago you can report by number, but you must give the address. The smaller towns report by number. Here is the objection to that, because that will go in to some local clerk and there might arise distrust on the part of the physician and patient. Indiana, to avoid that, has said that the physician must report directly to the state health officer. The report goes on a card index, and the state board will return all the records, if desired, when the case has been cured.

I have talked with a number of doctors, and some of them have said they would go to jail before they would report some of their cases. The Indiana regulation leaves no excuse for the doctor to refuse to report, as the report goes to the state and not to the local health officer. Now, then, in case this patient does not follow the instructions, then the doctor who had charge of that case must report it to the state health officer, and the state health officer will notify the local health officer to look him up, and then he is no longer entitled to secrecy. In the matter of quarantining houses of prostitution, Illinois has the best regulations. Where there is a house under suspicion, and still there is lack of convicting evidence, Dr. Drake deals with such cases effectively by means of a big red card, on which is printed in black letters, "Suspected Venereal Disease." This red card, for such cases, should be adopted by every state in the Union.

DR. C. ST. CLAIR DRAKE, *Springfield, Ill.*: Illinois was among the first states in the Union (I believe California preceded it) in attempting to control venereal disease. Our rules and regulations were promulgated in October and became effective Nov. 1, 1917. Experience of some seven months indicated that a revision of the rules was necessary. On May 1, 1918, we promulgated new rules and regulations which, I believe, cover every phase of the venereal disease problem. Possibly, and to some extent in some of the rules, we go a bit too far. There is one particular thing that I would like to elighten you on now, and that is our method of controlling the venereally infected prostitute. We have in our service plain-clothes investigators; two of them are men. These men are put into communities where we suspect the prevalence of prostitutes. On the strength of their reports raids are made upon the premises in which prostitution is practiced. Those raids are conducted with the assistance of the Attorney General of the state, because we find it very difficult in many instances to secure the cooperation of local officials. Most of the local officials are very reluctant in admitting that there is any prostitution in their town. When the arrested parties are taken to jail they are immediately subjected to a medical examination. Specimens for examination are sent to the state laboratory. Reports are returned very promptly to the local authorities. The judge then calls the case up and advises the prisoners of the findings in their cases and commits those who have been found to be infected to hospitals for detention and treatment, with the instruction to return the infected individuals to the court when cured. Under arrangements of that kind we have in hospitals in the state of Illinois at the present time some eighty-five to ninety infected prostitutes under treatment. One of the chief advantages of that particular method is that it places the expense of hospitalization and medical treatment on the county in which the prostitution existed, and it amounts to a very considerable sum, and tends to make the county authorities very reluctant about tolerating conditions of that kind in their county. We find that when they realize the expense that is to be imposed on them they are very keen to eliminate prostitution. We impose this expense on the county authorities under our pauper law, and practically every state in the Union has a law similar to the Illinois law, which provides that the indigent and sick found within the county shall be afforded necessary medical attention at the expense of the county; so what we are doing in Illinois in that regard can be done practically in every state in the Union. Dr. Cobb has referred to the placarding of premises. We have a provision in our rules that when an infected individual or a person suspected of having a venereal infection is resident on premises used for immoral purposes and will not consent to removal to a hospital where she may be retained for treatment, that the premises shall be placarded. In several instances it has been necessary to placard the premises and in all but one instance the placard has been up not more than two or three minutes. It is a very effective way of forcing patients to the hospital. We have taken rather extraordinary precautions to prevent the blackmailing of patients by quacks and unscrupulous practitioners of medicine. As to druggists, probably 60 per cent. of the venereally infected people obtain their treatment at drug stores. We require that druggists shall make a daily report of persons applying to them for treatment for venereal disease. In some cities, particularly at Rock Island, the druggists have responded very well; in fact, the druggists are reporting many more cases in Rock Island than are the physicians. There is a real need of standardization of these requirements, so that every state will have exactly the same requirements and so that the druggists in border-line cities, where the rules are being rigidly enforced, will not suffer at the hands of the druggists in other cities where rules are not being enforced. We are not having very much difficulty with the physicians in the state of Illinois. Wherever we get an opportunity to explain the provisions of the rules to the physicians they see that the rules are distinctly to their advantage, and we have no difficulty at all, after having the opportunity to explain in getting them to report their cases, and in a great number of instances in increasing numbers they are reporting their cases by name.